

Add new claims 6 and 7 reading as follows:

-- 6. An animal motion toy according to claim 5 wherein said power output shaft of said motor is reversibly rotatable and wherein said single gear changeover mechanism comprises an alternatively actuatable clutch means (35, 36) responsive to the direction of rotation of said power output shaft to effect the said order of rotation of said first, second and third crankshafts.

7. An animal motion toy according to claim 5 wherein said power output shaft is rotatable in only one direction and wherein said single gear changeover mechanism comprising a changeover gear means (86, 87) responsive to rotation of said output shaft in said one direction to effect the said order of rotation of said first, second and third crankshafts. --

REMARKS

The order of these remarks will follow the order of the objections as listed by the Examiner in the Final Rejection and these remarks are numbered for convenience of reference.

1. Japan Patent No. 103,689/1984

A copy of the above identified Japanese patent is enclosed.

2. Model

A production model of the claimed invention is enclosed.

3. Title

The title has been amended to read "ANIMAL MOTION TOY HAVING AN AUTOMATIC ACTION SWITCHING DRIVE MECHANISM".

4. 35 U.S.C. 112, First Paragraph

Pages 10 and 11 have been amended to clarify the indefiniteness referred to by the Examiner.

5. 37 CFR 1.83(a), Drawings

Applicants submit that every claimed feature of the invention

is shown in the drawings and reconsideration of this objection is respectfully requested. To aid the Examiner in his review of this objection, applicants have amended claim 5 by inserting therein the reference numbers used in the drawings. As can be noted from a review of amended claim 5, every feature is shown and suitably numbered in the drawings.

6. 35 U.S.C. 112, First Paragraph

Claim 5 was rejected for the same reasons set forth in paragraph 5 relating to the specification. As the specification has been amended to clarify the functioning of the single gear changeover mechanism, the wording of claim 5 is now clear and withdrawal of the objection thereto is respectfully requested.

7. 35 U.S.C. 112, Second Paragraph

Claim 5, which has been rejected as indefinite, has been amended to eliminate the "either ... or" recitation referred to by the Examiner. When the motor 28 is turned on, one of the first, second and third crankshafts (50, Fig. 5) rotates but not the other two. Subsequently, upon the continued rotation of the motor, the other two crankshafts (45, 65, Fig. 5) will rotate but not the one crankshaft (50, Fig. 5). This order of rotation is now expressly recited in amended claim 5 which in part reads:

"said single gear changeover mechanism being operable in response to rotation of said motor output shaft to effect  
- rotation of one of said first, second or third crankshafts but not the other two of said crankshafts, and subsequent  
- rotation of said other two of said crankshafts but not said one crankshaft; and ...." (Underlining added)

Withdrawal of the 35 U.S.C. 112 objection to claim 5 is respectfully requested.

8. 35 U.S.C. 103, Obviousness

Claim 5 stands rejected on Iwaya in view of Tomaro and Colwell. Applicants' claimed structure is novel and produces a

novel function. Applicants' toy is summarized as follows:

Function: Automatically controls the order of rotation of three crankshafts to first move only the legs.

Then leg movement is stopped and subsequently only the arms, mouth and sound bellows are actuated.

Structure: This novel function is achieved by a novel structure comprising the novel combination of first, second and third crankshafts 45, 50, 65 (Figs. 5 and 9) and a single gear changeover mechanism 30-44 (Fig. 5) or 30, 31, 85-95 (Fig. 9).

Neither the claimed function nor structure is taught or suggested by the cited prior art.

IWAYA

Function: The head moves while making a whining sound and the legs move in walking motion, and then the legs cause the dog to move in a circle and jump.

Structure: Uses two crankshafts 26, 42 and two separate gear switching mechanisms 15, 16 and 36, 37, one for moving the legs and the other for moving the head and sound generator.

TOMARO

Function: Sound actuated duck waddles and makes a quacking sound.

Structure: Uses a single rotary axle 18 which does not go through the center of the wheels 7 and 8 so that the wheels are eccentrically mounted.

COLWELL

Function: Horse walks.

Structure: Uses front and rear crankshafts 20 and 20'.

In comparison, applicants use a single gear changeover

mechanism in combination with three crankshafts which is totally different in structure from any of the cited references and from Iwaya which uses two crankshafts and two gear switching mechanisms. Each crankshaft of Iwaya has its own individual and separate gear switching mechanisms.

Applicants' novel structure is specifically defined in amended claim 5 which distinguishes in reciting:

"a single gear changeover mechanism (30-44 or 31, 32, 85-95) mounted on said toy body and operatively connected between said motor output shaft and said first, second and third crankshafts, said single gear changeover mechanism being operable in response to rotation of said motor output shaft to effect  
- rotation of one of said first, second or third crankshafts but not the other two of said crankshafts, and subsequent  
- rotation of said other two of said crankshafts but not said one crankshaft; ...." (Underlining added)

As the cited references do not teach either the above claimed combination of a single gear changeover mechanism and the three crankshafts or the order of rotation of the three crankshafts, allowance of claim 5 is requested.

Dependent claims 6 and 7 have been added to provide applicants a proper scope of protection. These claims are directed to the embodiments best shown in Figs. 5 and 9, respectively. Claim 6 distinguishes over the cited prior art in reciting that the power output shaft of the motor is

"... reversibly rotatable and wherein said single gear changeover mechanism comprises an alternatively actuatable clutch means (35, 36) responsive to the direction of rotation of said power output shaft to effect the said order of rotation of said first, second and third crankshafts."

The cited prior art does not teach this combination. Iwaya uses a single direction motor, two crankshafts, and two gear changeover mechanisms. Tomaro does not disclose any crankshafts. Colwell discloses only two crankshafts, both linked together by connecting rods, and no gear changeover mechanism. Allowance of

claim 6 is respectfully requested.

Claim 7 distinguishes over the cited prior art in reciting

"... single gear changeover mechanism comprising a changeover gear means (86, 87) responsive to rotation of said output shaft in said one direction to effect the said order of rotation of said first, second and third crankshafts."

The prior art does not teach the use of a single gear changeover mechanism to effect the order of rotation of first, second and third crankshafts. In Iwaya, the output shaft drives a first crankshaft 26 and a first gear changeover mechanism 15, 16 which in turn drives a second gear changeover mechanism 36, 37 and a second crankshaft 42. Allowance of claim 7 is respectfully requested.

The Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 14-1080.

Respectfully submitted,

  
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Dated: June 28, 1988

Enclosures

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